



Read each question carefully and choose the correct answer: (30 × 2 = 100 Marks)

1. Nancy took an apple with her to work. She ate it at lunch time. The pronoun 'it' refers to the antecedent:
A. Nancy B. work C. apple D. lunch time
2. Mary and Bob have books.
A. mine B. their C. ours D. theirs
3. Masako cut while she was chopping vegetables.
A. themselves B. ourselves C. myself D. herself
4. There is a large area of land that has no rainfall, no trees, and no plants., this area of the country is a desert.
A. In other words B. Each other C. Every other D. Other than
5. Look! It (snow) right now.
A. snows B. is snowing C. are snowing D. was snowing
6. This room (smell) very bad this morning.
A. is smelling B. was smelling C. has been smelling D. smells
7. The student his hand in class.
A. rose B. raised C. has raised D. is raising
8. While Mrs Emerson (read) a story to the little boy, he fell asleep.
A. reads B. is reading C. was reading D. read
9. Since this morning, Jack (call) here four times trying to reach you.
A. has called B. calls C. have called D. is calling
10. Last night, my friend and I (have) some free time, so we went to a show.
A. have B. are having C. has had D. had
11. The little girl is dirty from head to foot because she (play) in the mud.
A. had played B. has been playing C. will play D. have been playing
12. I was late. The teacher (give) an exam when I got to class.
A. gives B. had given C. is giving D. have given
13. It was midnight. I (study) for five straight hours. No wonder I was tired.
A. have been studying B. study C. had been studying D. is studying
14. When I looked across the street, Mr Fox was waving at me. When I looked across the street, Mrs Cook waved at me.
Question: Who began to wave at me before I looked across the street?
A. Mr Fox B. Mrs Cook C. both of them D. none of them
15. Those trees (be) cut down next week.
A. were B. had been C. was D. will be
16. I need to improve my skills so that I can get a better job. I (take) a course in word-processing.
A. will take B. am going to take C. have taken D. took
17. A: 'Oh! I have spilled coffee on my shirt!' B: 'Just a minute. I (get) a damp cloth for you.'
A. will get B. am going to get C. have got D. got
18. 'When students graduate, they usually receive diplomas.' The meaning of this sentence is:
A. in the future B. now C. habitually D. in the past
19. My cough sounds terrible. I should see a doctor. I (visit) the doctor tomorrow afternoon.
A. visited B. was visiting C. am visiting D. had visited
20. When I arrive at the airport tomorrow, my whole family (wait) for me there.
A. will be waiting B. waited C. had waited D. were waiting
21. Margaret was born in 1975. By the year 2025, she (live) for fifty years.
A. lived B. will have been living C. had lived D. was living
22. We (play) thirty matches by the end of the football season next Saturday.
A. played B. had played C. were playing D. shall have played
23. 'If I were a carpenter, I would build my own house.' The meaning of this conditional sentence is:
A. I am a carpenter so I can build my own house. B. I am not a carpenter, but I can build my own house.
C. I am not a carpenter so I cannot build my own house. D. I am a carpenter, but I cannot build my own house.
24. Situation: I wanted to write my parents a letter last night, but I did not have enough time. So I didn't write the letter.
This situation is expressed in a conditional sentence as:
A. If I have enough time later tonight, I shall write my parents a letter.
B. If I had enough time right now, I would write my parents a letter.
C. If I have enough time, I write my parents a letter every week.
D. If I had had enough time, I would have written my parents a letter last night.
25. If the rain comes early next year, there (be) a good harvest.
A. will be B. had been C. would be D. would have been
26. If the weather had been finer, the match (take place).
A. will take place B. would have taken place C. would take place D. takes place
27. Khalid did not come to the meeting last night. I wish he (come) to the meeting last night.
A. would come B. comes C. is coming D. had come

28. The girl to the Minister gave the prize was in Form I.
A. who B. that C. whom D. which
29. Since $6 - 15$ and $3 - 7$ are not counting numbers, we have shown that the counting numbers are not closed under the operations:
A. addition & division B. subtraction & addition C. subtraction & division D. multiplication & addition
30. 'Four times open brackets eight divided by two close brackets equals sixteen.' This sum is written in numbers and arithmetic signs as: A. $(4 \times 8) \div 2 = 16$ B. $4 \times (8 \div 2) = 16$ C. $4 - (8 \times 2) = 16$ D. $(4 + 8) \times 2 = 16$
31. The product of two negative numbers is
A. negative only B. positive and negative C. positive or negative D. positive only
32. The most outstanding characteristic of zero is its neutrality under the operations:
A. addition & subtraction B. division & subtraction C. multiplication & division D. addition & multiplication
33. A rational number is any number which can be written in the form $a + b$ or a/b where a is any integer and b is any integer which is not:
A. three B. two C. one D. zero
34. The number which is the result when one number is divided by another number is called:
A. sum B. quotient C. product D. remainder
35. The common fraction ($\frac{5}{8}$) is written and read in words as:
A. five eighth B. fifth eight C. five eighths D. five eight
36. The decimal number (17.591) is written and read in words as:
A. seventeen point five hundred and ninety-one B. one seven point fifty-nine and one C. five nine one point seventeen D. seventeen point five nine one
37. The ordinal number for the cardinal number (53 = fifty-three) is:
A. fifty-third B. five-third C. fifty-threeth D. fifth-three
38. For every x and y , $x + y = y + x$. For every x and y , $xy = yx$. These algebraic axioms are called:
A. commutative axioms B. inverse axioms C. associative axioms D. unit axioms
39. One of Euclid's postulates in geometry states that a straight line may be drawn to include
A. no points B. one point C. two points D. three points
40. A point has
A. one dimension B. direction C. two dimensions D. position
41. An angle that is between 90° and 180° is called:
A. acute angle B. obtuse angle C. reflex angle D. right angle
42. The formula for the surface area of a rectangle is:
A. $\frac{1}{2} \times \text{base} \times \text{height}$ B. $\text{length} \times \text{width}$ C. πr^2 D. $\text{length} \times \text{width} \times \text{height}$
43. is a triangle that has two equal sides and two equal angles.
A. Equilateral triangle B. Right-angled triangle C. Isosceles triangle D. Scalene triangle
44. Pythagoras' theorem states that in right-angled triangle, the square of the is equal to the sum of the squares of the other two sides. A. base B. height C. perimeter D. hypotenuse
45. The formula for the volume of a pyramid is :
A. $(\text{length} \times \text{width} \times \text{height}) \div 3$ B. $\pi r^2 h$ C. $\text{length} \times \text{width} \times \text{height}$ D. $\frac{\pi r^2 h}{3}$
46. The number one is the neutral element under:
A. addition B. division C. subtraction D. multiplication
47. The seventeen hundreds (= 1700s) cover the years from to
A. 1400 → 1499 B. 1500 → 1599 C. 1600 → 1699 D. 1700 → 1799
48. is the straight line that touches the edge of a circle but does not intersect it.
A. Tangent B. Radius C. Chord D. Arc
49.  This polygon is a plane with four equal sides but no right angles; the opposite sides are parallel and the opposite angles are equal. It is:
A. a square B. a rhombus C. an octagon D. a rectangle
50.  It is a solid with one circular base and one curved side; it has one curved edge and one apex. It is:
A. a pyramid B. a tetrahedron C. a cylinder D. a cone

SECTION ONE: VOCABULARY

Choose the correct answer a, b, or c. (40)

- _____ involves four basic operations, +, -, x, ÷.
 a-Geometry b-Arithmetic c-Trigonometry
1. The ordinal word for 52 is _____.
a-fifty-second b-fiftyth-second c-fiftieth-two
2. The _____ sign consists of a short horizontal line
 a-multiplication b-division c-minus
3. The width of a circle is called the _____.
 a-circumference b-perimeter c-diameter
4. An _____ triangle has 3 equal sides and angles.
a-equilateral b-scalene c-isosceles
5. Spherical shapes are based on _____.
 a-squares b-circles c-triangles
6. _____ are used to measure pressure.
 a-Thermometers b-Calipers c-Barometers
7. In the equation $x + 10 = 30$, there are two _____.
 a-real numbers b-unknowns c-variable
8. If $2x = 6$ metres, then x must be 3 metres..
a-equals b-is equals c-is equal
9. There is a dam across the river to make a _____.
 a-ylon b-reservoir c-embankment
10. The _____ is called a visual display unit (VDU).
 a-scanner b-printer c-monitor
11. _____ is a card which runs your monitor.
 a-HDD b-SVGA c-USB
12. _____ have a positive charge.
a-Protons b-Electrons c-Neutrons
13. Elements are arranged in 18 vertical _____.
 a-periods b-groups c-line
14. Mercury oxide _____ to mercury and oxygen
 a-combines b-composes c-decomposes
15. The reservoirs destroy the rivers _____
 they take the oxygen out of them.
a-because b-however c-but
16. If the server is _____, it is not able to
 make a connection.
 a-up b-down c-in
17. We can _____ one number to another by
 using a calculator.
a-add b-subtract c-divide
18. The _____ is a central computer which
 stores and provides data to other computers
 on the network.
a-server b-browser c-explorer
19. We can read $51 - 12 = 39$ as _____.
 a-Fifty-one subtracted from twelve is thirty-nine.
 b-Twelve subtract from fifty-one equal thirty-nine.
 c-Fifty-one minus twelve equals thirty-nine.

SECTION TWO: GRAMMAR

Choose the correct answer a, b, or c. (40)

20. Scientists _____ a simple way to show the
 Arabic numerals on the screen of the calculator.
a-needed b-were needed c-are needed
21. A triangle has three angles _____ add up to 180
a-which b-which it c-which they
22. _____ must _____ careful to type the address
 correctly.
 a-to be b-be c-being
23. _____ aren't any vertical line in the number 7
 a-They b-Their c-There
24. How _____ is the rectangle?
a-high b-height c-the height
25. How many sides _____ there in a square?
 a-is b-are c-was
26. The higher speed means _____ performance.
 a-good b-gooder c-better
27. When you read the fraction 0.50, _____
 fifty after the decimal point.
 a-not say b-don't say c-say not
28. The bottle _____ to hold 30 cm³ of perfume.
 a-should b-has c-must
29. Data _____ stored in a portable form.
 a-are b-will c-can be
30. We _____ some more money soon.
 a-going to need b-will need c-are needing
31. I'll call you when she _____.
a-arrives b-will arrive c-would arrive
32. She wouldn't have left if I _____ the truth
 a-tell b-told c-had told
33. I don't enjoy _____.
 a-cook b-cooking c-to cook
34. I _____ at home last week.
a-was b-am c-have been
35. If we _____ 400 to the other side, then
 3000 - 400 is 2x.
 a-are moving b-moved c-move
36. If I knew the answer, _____ tell you.
 a-I'll b-I'd c-I'd have
37. These computers _____ in Japan.
 a-make b-made c-are made
38. The keyboard _____ us to input data and
 commands
a-allows b-allow c-allowing
39. _____ here since October.
a-I've worked b-I work c-I am working

TURN TO SIDE TWO>>>>>>>>

SECTION THREE: READING

Read the following text and choose the best answer a, b, or c.

(20)

Your new pocket calculator is easy to use. You can add, subtract, multiply, and divide in a moment.

How to turn on Supercalc

Press the AC/ON key.

How to calculate with whole numbers

Example 1: (Multiply 2 by 3.)

Press the 2 key, then the \times key, then 3. Finally, press =. The result, 6, appears on the screen.

How to correct a mistake

If you make a mistake, press the DEL (for delete) key. This removes the last number or sign.

How to clear the screen

Before you do a calculation, remove any numbers from the screen. Press AC/ON. (AC = account clear)

How to calculate with decimals

Press the numbers before the decimal, then press the decimal point key (.) and then the numbers after the decimal. *Example 2: (Add 26.7 and 43.5) Press 2, 6, ., 7, +, 4, 3, ., 5, =*

How to calculate with percentages

What is 50%? It is the same as a half or $\frac{1}{2}$, which is 1 divided by 2. You can check this on Supercalc. Press 1, +, 2 then %. The number 50 appears on the screen. Don't press the equals sign when you are calculating percentages. Try another one. If you buy something for \$10 and the shopkeeper gives you a discount of \$1.50, what percentage discount is that? Press 1.50, then +, then 10, then %. The number on the screen (15) is the percentage.

41- The best title of the text is:

~~a-How to use a Supercalc~~

b- How to choose a Supercalc

c-What is a calculator

42- This text comes from:

a-a dictionary

b-an instruction leaflet

c-an encyclopedia

43- The AC/ON key is used to:

a-turn on Supercalc

b-show the result

c-turn on Supercalc and clear the screen

44- Use the DEL key to:

a-clear the screen

b-remove the last number

c-remove the last sign or number

45- To multiply 13.15 by 1.02, press:

a-10 keys

b-11 keys

c-12 keys

46- To calculate a percentage on this calculator, press:

a-1st number, 2nd number, %

b-1st number, \div , 2nd number, %

c-1st number, \div , 2nd number, =, %

47- removes in line (8) means:

~~a-takes away~~

b-moves forwards

c-goes backwards

48- clear in line (9) means:

a-wash away

b-clean (with detergents)

c-empty (with nothing on it)

49- check in line (15) means:

~~a-examine~~

b-increase

c-include

50- that in line (18) refers to:

a-10 \$

b-1.50 \$

c-50 %

GOOD LUCK.

Lecturer,
F. Trahulsi

SECTION ONE: VOCABULARY

Choose the correct answer a, b, or c. (40)

1. The _____ sign has two diagonal lines crossed by each other.
a-plus b-division c-multiplication
2. The ordinal word for 41 is _____.
a-forty-first b-forty c-fortieth-first
3. _____ is the study of points and lines, surfaces and angles, and solid shapes.
a-Arithmetic b-Geometry c-Algebra
4. The length around most shapes is called the _____.
a-diameter b-circumference c-perimeter
5. An _____ triangle has two equal sides and angles.
a-isosceles b-scalene c-equilateral
6. Cuboid shapes are based on a _____.
a-circle b-square c-triangle
7. We can _____ one number from another by using a Supercalc.
a-subtract b-add c-multiply
8. _____ are used to measure temperature.
a-Barometers b-Manometers c-Thermometers
9. In the equation $a^2 + b^2 = c^2$, there are three _____.
a-variables b-values c-real numbers
10. If we represent 3m as 3000mm, then we can _____ the equation.
a-solve b-dissolve c-solution
11. _____ carry electricity from the HEP down to the town.
a-Cliffs b-Pylons c-Bay
12. We can store a lot of data on the _____ inside the computer.
a-USB key b-floppy disk c-hard disk
13. _____ is the speed which the computer runs at.
a-Megabytes b-Megahertz c-Gigabytes
14. _____ separate the website name from www and the domain name.
a-Dots b-Hyphens c-Underscores
15. "com" in the web address stands for _____.
a-computer b-company c-compliment
16. If atoms of the same type combine, the matter is called _____.
a-an element b-a compound c-a composition
17. The atomic number is the number of _____ in the nucleus.
a-electrons b-protons c-neutrons
18. Coal, oil, and gas are sources of energy which will run _____.
a-out b-in c-at
19. The number below the line in a common fraction is called the _____.
a-dominator b-denominator c-numerator
20. We can read $3.56 \times 7 = 24.92$ as _____.
a-three point fifty six times seven equals two four point ninety-two.
b-three point fifty six times seven equals twenty-four point ninety-two.
c-three point five six times seven equals twenty-four point nine two.

SECTION TWO: GRAMMAR

Choose the correct answer a, b, or c. (40)

21. Mendeleev _____ spaces for elements still to be discovered.
a-left b-was left c-is left
22. A rectangle has two pairs of lines _____ parallel.
a-which b-which are c-which they are
23. Scientists must _____ able to measure physical objects.
a-be b-to be c-being
24. For centuries, man _____ the fossil fuels to provide energy.
a-would used b-are used c-has used
25. What is _____ of the cube?
a-the width b-height c-radius
26. How many angles _____ there in a triangle?
a-is b-are c-was
27. A bigger screen means a _____ picture.
a-good b-bad c-better
28. _____ that the first three ordinal numbers are different words from the cardinals.
a-Not forget b-Don't forget c-Forget not
29. The reservoirs destroy the rivers _____ they take oxygen out of them.
a-so b-but c-because
30. You may have clicked on Back while you _____ a secure site.
a-were accessing b-enter c-load
31. The weather forecast says it _____ tomorrow.
a-going to rain b-will rain c-is raining
32. I won't know the situation until he _____ back.
a-gets b-will get c-would get
33. I would have passed if I _____ harder.
a-work b-worked c-had worked
34. I enjoy _____ the gardening.
a-do b-doing c-to do
35. _____ her parents last night?
a-Did she visit b-Did she visited c-Has she visited
36. If we _____ 400 to the other side, then 3000-400 is 2x.
a-are moving b-moved c-move
37. If you didn't eat so much, you _____ lose weight.
a-will b-would c-would have
38. Information on the Internet _____ by search engines such as Google.
a-index b-are index c-can be indexed
39. A CD-ROM _____ huge amounts of data.
a-holds b-copy c-carry
40. If you get an error message, you _____ connected to the Internet.
a-may not have b-may not c-will not

SECTION THREE: READING

Read the following text and choose the correct answer a, b, or c.

(20)

Introduction: The General Manager asked the Technical Department to look at possible bottle shapes for the new perfume, Moonlight, and to recommend the best shape.

Terms of reference: The new bottle has to fit into the existing packaging which is a cube of 4.5 cm sides. The bottle therefore has to have maximum dimensions of 4 cm in any direction. The bottle has to hold 30 cc (cm³) of perfume. The shape has to be interesting. The Design Department suggests a pyramid, a cylinder, a sphere or a cone.

Analysis: The Technical Department looked at the four possible shapes and calculated the volume for the largest possible bottle of each shape. They then wrote a report.

Conclusion: The sphere is the only suitable shape for this size of packaging. The cylinder holds far too much while the pyramid and the cone do not hold enough.

Recommendation: We should use a spherical shape for the new bottle. We should not use a cylinder, cone or pyramid.

41-The purpose of the report is to:

- a-suggest a package shape.
- b-recommend a bottle shape.
- c-recommend a name for the perfume.

42- The cylinder is not suitable because:

- a-it holds too much perfume.
- b-it doesn't hold enough perfume.
- c-it doesn't fit in the packaging.

43-The final section of the report explains:

- a-what the writer discovered.
- b-what the writer thinks the company should do.
- c-what the writer did.

44-The section which shows what the writer discovered is the:

- a-Introduction.
- b-Terms of reference.
- c- Conclusion.

45-Introduction in line (1) means:

- a-part of the report which explains the problem that has to be solved.
- b-piece of the report that discusses the reasons.
- c-the beginning part of the report which explains its purpose.

46-Terms of reference in line (3) means:

- a-areas or conditions which have to be examined.
- b-solutions which may be given.
- c-sites which have to be visited.

47-Analysis in line (6) means:

- a-aim.
- b-examination.
- c-addition.

48-Conclusion in line (8) means:

- a-end reached after discussion.
- b-opinion which is not the result of reasoning.
- c-method of doing something.

49-recommendation in line (10) means:

- a-obligation.
- b-organization.
- c-advice.

50-which in line (3) refers to:

- a-the bottle.
- b-the packaging.
- c-the cube.

GOOD LUCK.

Lecturer,
F. Trabulsi.

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- ⑦

Choose the correct answer a, b, or c

(40)

- 21-Ten years later, Lars Nilson _____ Scandalum.
 a-discovered b- was discovered c-has discovered
 — 22-There is an important constant _____ called pi.
 a-which b-which is c-which it is
 — 23-The shape has _____ interesting.
 a-be b-to be c-being
 — 24-The results of measurement are useless _____
 standard units of measurement are used
a-if b-so c-unless
 — 25-How _____ is the line?
 a-long b-length c-length
 — 26-After processing, data _____ sent to an
 output device.
 a-is b-are c-will
 27-A faster modem means _____ time on line.
 a-much b-little c-less
 — 28- _____ on back while you are accessing a
 secure site.
 a-not click b-don't click c-click not
 29-The train _____ on time.
 a-always b-always is c-is always
 30-While I _____ for a bus, it started to rain.
 a-was waiting b-have waited c-am waiting
 31-"I can't hear the TV very well". " _____"
 a-I'm turning it up b-I'll turn it up
c-I'm going to turn up
 32-I'll phone you when she _____.
a-arrives b-will arrive c-would arrive
 — 33-If you _____ so hard, you would have failed.
 a-wouldn't study b-didn't study c-hadn't studied
 — 34-I enjoy _____ stories.
 a-read b-reading c-to read
 35-Who _____ them? Barbara invited them?
 a-invited b-did invited c-has invited
 — 36-If the short walls _____ are equal, then you _____
 to measure them.
 a-haven't needed b-didn't need c-don't need
 — 37-If I _____ enough money, I'd buy that house.
a-have b-had c-will have
 — 38-Fractions _____ as percentages.
 a-express b-are express c-can be expressed
 39-The nucleus of an atom _____ protons
 and neutrons.
 a-contains b-consist of c-involved
 40-If you get an error message, you may _____
 a mistake
 a-have made b-made c-makes

TURN TO SIDE TWO>>>>>>>

SECTION THREE: READING

(20)

Read the following text and choose the correct answer a, b, or c.

Alternative Energy Sources

The fossil fuels – coal, oil and gas – are not renewable, so they will run out. Three renewable sources of energy are wind, water and sunshine. These sources have many advantages, but they also have disadvantages. Windmills, hydroelectric plants and solar cells are all used to make electricity. A farm of new windmills can provide enough power for a large city. However if you try to build wind farms on the land or out at sea, local farmers and fishermen complain because of the noise and the damage to farming and fishing.

Modern HEPs could meet 30-40% of world energy needs. However, the HEP huge reservoirs destroy the rivers that supply them because they take the oxygen out of the water that is returned to the rivers.

In solar cells, sunlight pushes electrons out of atoms and leaves holes which are filled by other electrons. The movement of electrons is electricity. Solar cells are reliable and do not need a lot of maintenance. However, solar power is not the answer for some areas because they do not get enough sunshine.

41- This text is about:

- a- Old energy sources.
- b- Renewable energy sources
- c- Sources of energy which will run out.

42- One of the following is an advantage of windmills:

- a- They can provide power for a large city.
- b- They damage farming and fishing.
- c- They are noisy.

43- One disadvantage of HEPs is that:

- a- They need oxygen. —
- b- They need a large reservoir.
- c- HEP reservoirs destroy the rivers.

44- One of the following statements is not correct:

- a- Solar power cannot be used in areas that do not get enough sunshine.
- b- Wind, water and sunshine are three alternative sources of energy
- c- Fossil fuels are sources of energy that have run out.

45- complain in the text means:

- a- To say that one is unhappy or not satisfied
- b- To be unhappy.
- c- To feel angry.

46- meet in the text means:

- a- Come together.
- b- Satisfy.
- c- Discover.

47- reservoirs in the text means:

- a- Places (often artificial lakes) where water is stored.
- b- Natural lakes.
- c- Water courses.

48- reliable in the text means:

- a- Portable
- b- Believable.
- c- Dependable.

49- maintenance in the text means:

- a- Act of keeping in good condition.
- b- Act of keeping doing something.
- c- Being supported with money.

50- which in the text refers to:

- a- Atoms.
- b- Holes.
- c- Electrons.

GOOD LUCK.

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Lecturer,
F. Trabulsi.